



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,587	11/24/2003	Donna K. Hodges	BS030353	5018
7590 Scott P. Zimmerman P.O. Box 3822 Cary, NC 27519	02/09/2007		EXAMINER SIKRI, ANISH	
			ART UNIT 2109	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	02/09/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

	Application No.	Applicant(s)
	10/720,587	HODGES ET AL.
	Examiner Anish Sikri	Art Unit 2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on 24 November 2003.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____.                                     |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/08/2004</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|   | 6) <input type="checkbox"/> Other: _____.                         |

**DETAILED ACTION**

***Specification***

The application numbers in the specification in the paragraphs [0002]-[0009]  
(i.e., XX/XXX,XXX) are objected as the specification does not mention any numbers.  
The application numbers need to be provided.

The title of the invention is not descriptive. A new title is required that is clearly  
indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 to 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Almgren et al (WO 00/41426) in view of Kato (US 2002/0112060 A1).

Consider Claim 1, Almgren et al in clearly disclose the method of providing communications services, comprising the steps of: receiving a request for communications service, the request for communications service originating from a client communications device associated with a user, the request for communications service requesting communications service from a service provider (Almgren et al, Pg 1 Lines 10-15).

Almgren et al clearly shows the step of dynamically assessing in real-time an availability of at least one of i) a communications network operated by the service provider and ii) another communications network operated by another service provider (Almgren et al, Pg 4, Lines 1-5). Almgren et al discloses the best-value scenario maximizing profitability for the service provider; and providing the communications service to fulfill the request, the communications service provided according to the best-value scenario (Almgren et al, Page 1, Lines 16-20). Almgren et al fails to disclose step

of ascertaining a best-value scenario of segmentation, dispersion, assemblage, and routing of electronic data to fulfill the request. Nonetheless, Kato discloses the method of ascertaining a best-value scenario of segmentation, dispersion, assemblage, and routing of electronic data to fulfill the request (Kato, Page [0356]). It shows that the packets are made up of plurality of packets, and it combines two or more packets to become as one single packet and it also can divide a single packet into plurality of packets to sent the divided packets out. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the best-value scenario of segmentation, dispersion, assemblage, and routing of electronic data to fulfill the request taught by Kato in Almgren et al's method of communication service for the purpose of optimizing the use of the service provider resources.

Consider Claim 2, and as applied to claim 1 above, Almgren et al as modified by Kato, also discloses the step of assessing in real-time an availability of network routing in the communications network operated by the service provider (Almgren et al, Pg 1, Lines 23-25, Pg 2, Lines 3-10).

Consider Claim 3, and as applied to claim 1 above, Almgren et al as modified by Kato, also discloses the step of assessing in real-time an availability of network routing in the another communications network operated by the another service provider (Almgren et al et al, Pg 3, Lines 21-27, Pg 4, Lines 1-4). Almgren et al clearly shows

that if the provider can not get network access/routing/bandwidth as stated on the agreement, the user will have an option to get handed off to a different provider for network access.

Consider Claim 4, and as applied to claim 1 above, Almgren et al as modified by Kato, also discloses the step of assessing in real-time an availability of network bandwidth in the communications network operated by the service provider (Almgren et al, Pg 1, Lines 18-20, 23-25). The use of lower bit-rate or higher bit-rate in network clearly states the network bandwidth usage.

Consider Claim 5, and as applied to claim 1 above, Almgren et al as modified by Kato, also the step of assessing in real-time an availability of network bandwidth in the another communications network operated by the another service provider (Almgren et al et al, Pg 3, Lines 21-27, Pg 4, Lines 1-4). Almgren clearly states the use of lower bit-rate or higher bit-rate in the network (Almgren et al, Pg 1, Lines 18-20, 23-25). According to Almgren et al, if the user is not satisfied with lower-bandwidth, the user can get access to another provider providing better bandwidth (Almgren et al et al, Pg 3, Lines 21-27, Pg 4, Lines 1-4).

Consider Claim 6, and as applied to claim 1 above, Almgren et al as modified by Kato clearly discloses the method of ascertaining the best-value scenario comprises ascertaining a lowest-cost scenario for formatting the electronic data according to a

characteristic of the client communications device (Almgren et al, Pg 1, Lines 18-20, 23-25, Pg 2 Lines 3-15).

Consider Claim 7, and as applied to claim 1 above, Almgren et al as modified by Kato clearly discloses the best-value scenario comprising and ascertaining the lowest-cost scenario for providing the communications service (Almgren et al, Pg 1, Lines 18-20, 23-25, Pg 2 Lines 3-15).

Consider Claim 8, and as applied to claim 1 above, Almgren fails to disclose clearly the step of accessing a Service Level Agreement, the Service Level Agreement being an agreement defining parameters for the communications service requested by the user. Nonetheless, Kato clearly discloses the step of accessing a Service Level Agreement, the Service Level Agreement being an agreement defining parameters for the communications service requested by the user (Kato Page 35, claim 44). It shows by having a program to manage the SLA processing and check as to whether predetermined service is maintained in accordance with the SLA already agreed in advance between network provider and the customer. This shows that the Service Level Agreement defines the parameters for which the customer has signed up for to receive the requested service. Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to incorporate the step of accessing a Service Level Agreement, the Service Level Agreement being an agreement defining parameters for the communications service requested by the user

taught by Kato in Almgren et al's step for the purpose of satisfying the user's requirements.

Consider Claim 9, and as applied to claim 1 above, Almgren clearly discloses the step of ascertaining the best value scenario comprises maximizing profitability for the service provider (Almgren et al, Pg 1, Lines 18-20, 23-25, Pg 2 Lines 3-15). But Almgren et al fails to disclose properly about the step satisfying the Service Level Agreement. Nonetheless, Kato discloses the step satisfying the Service Level Agreement (Kato Page 35, claim 44). It shows by having a program to manage the SLA processing and check as to whether predetermined service is maintained in accordance with the SLA already agreed in advance between network provider and the customer. This shows that the Service Level Agreement defines the parameters for which the customer has signed up for to receive the requested service. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Service Level Agreement satisfaction between the user and provider taught by Kato in Almgren et al's step for the purpose of optimizing the use of the service provider resources while satisfying the user's requirements.

Consider Claim 10, and as applied to claim 1 above, Almgren et al as modified by Kato discloses the step of ascertaining the best-value scenario comprises utilizing the another communications network operated by the another service provider to provide the communications service (Almgren et al et al, Pg 3, Lines 21-27, Pg 4, Lines

1-4). Almgren et al clearly shows that if the provider can not get network access/routing/bandwidth as stated on the agreement, the user will have an option to get handed off to a different provider for network access (Almgren et al et al, Pg 3, Lines 21-27, Pg 4, Lines 1-4).

Consider Claim 11, and as applied to claim 1 above, Almgren et al as modified by Kato discloses the step of providing the communications service comprises utilizing the another communications network operated by the another service provider to provide the communications service. (Almgren et al et al, Pg 3, Lines 21-27, Pg 4, Lines 1-4). Almgren et al clearly shows that if the provider can not get network access/routing/bandwidth as stated on the agreement, the user will have an option to get handed off to a different provider for network access (Almgren et al et al, Pg 3, Lines 21-27, Pg 4, Lines 1-4).

Consider Claim 12, and as applied to claim 1 above, Almgren et al discloses that the network can be operated by a service provider or another service provider (Almgren et al et al, Pg 3, Lines 21-27, Pg 4, Lines 1-4). Almgren et al fails to disclose whether the network is a wireline or a wireless network. Nonetheless, the Examiner takes Official Notice that it is notoriously well known in the art of networking, that a network can generally consist of wireline or a wireless network. Therefore, it would be obvious to a person of ordinary skill in the art at the time the invention was

made to implement the method of Almgren et al. and Kato in a wireline or wireless network, as known in the art, for the purpose of providing service diversity.

Consider Claim 13, and as applied to claim 1 above, Almgren et al in view of Kato discloses the step of providing the communications service comprises utilizing a network (Almgren et al, Pg 3, Lines 21-27, Pg 4, Lines 1-4). Almgren et al fails to disclose that the network can be of any i) cellular network operated by the another service provider, ii) an I.E.E.E. 802 wireless network operated by the another service provider, iii) a radio frequency (RF) wireless network operated by the another service provider, iv) an Industrial, Scientific, and Medical (ISM) wireless network operated by the another service provider, v) an infrared (IR) wireless network operated by the another service provider, and vi) a wireless network operated by the another service provider using another portion of the electromagnetic spectrum. Nonetheless, the Examiner takes Official Notice that it is notoriously well known in the art of networking, that a network can generally consist and not limited to be wireline, wireless, RF network. Therefore it would be obvious to a person of ordinary skill in the art at the time the invention was made to implement the method of Almgren et al. and Kato in a any wireless network, as known in the art, for the purpose of providing service diversity.

Consider Claim 14, Almgren et al clearly discloses system, comprising: a Analysis Module stored in a memory device, the Analysis Module receiving a request for

communications service, the request for communications service originating from a client communications device associated with a user, the request for communications service requesting communications service from a service provider (Almgren et al, Pg 1 Lines 10-15), the Analysis Module dynamically assessing in real-time an availability of at least one of i) a communications network operated by the service provider (Almgren et al, Pg 1, Lines 23-25, Pg 2, Lines 3-10) and ii) another communications network operated by another service provider (Almgren et al et al, Pg 3, Lines 21-27, Pg 4, Lines 1-4). Almgren et al clearly discloses the best-value scenario maximizing profitability for the service provider, the Analysis Module providing the communications service to fulfill the request, the communications service provided according to the best-value scenario; and a processor communicating with the memory device (Almgren et al, Page 1, Lines 16-20)

Almgren fails to disclose the Analysis Module ascertaining a best-value scenario of segmentation, dispersion, assemblage, and routing of electronic data to fulfill the request. Nonetheless, Kato discloses the method of ascertaining a best-value scenario of segmentation, dispersion, assemblage, and routing of electronic data to fulfill the request (Kato, Page [0356]). It shows that the packets are made up of plurality of packets, and it combines two or more packets to become as one single packet and it also can divide a single packet into plurality of packets to sent the divided packets out. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the best-value scenario of segmentation, dispersion, assemblage, and routing of electronic data to fulfill the request taught by

Kato in Almgren's method of communication service for the purpose of optimizing the use of the service provider resources.

Consider **Claim 15**, Almgren et al in view of Kato clearly shows that it is a computer program product, comprising: a computer-readable medium; and a Analysis Module stored on the computer-readable medium, the Analysis Module receiving a request for communications service, the request for communications service originating from a client communications device associated with a user, the request for communications service requesting communications service from a service provider(Almgren et al, Pg 1 Lines 10-15), the Analysis Module dynamically assessing in real-time an availability of at least one of i) a communications network operated by the service provider (Almgren et al, Pg 1, Lines 23-25, Pg 2, Lines 3-10) and ii) another communications network operated by another service provider (Almgren et al et al, Pg 3, Lines 21-27, Pg 4, Lines 1-4). Almgren et al clearly discloses the best-value scenario maximizing profitability for the service provider, the Analysis Module providing the communications service to fulfill the request, the communications service provided according to the best-value scenario (Almgren et al, Page 1, Lines 16-20).

Almgren et al fails to disclose the Analysis Module ascertaining a best-value scenario of segmentation, dispersion, assemblage, and routing of electronic data to fulfill the request. Nonetheless, Kato discloses the method of ascertaining a best-value scenario of segmentation, dispersion, assemblage, and routing of electronic data to fulfill the request (Kato, Page [0356]). It shows that the packets are made up of

plurality of packets, and it combines two or more packets to become as one single packet and it also can divide a single packet into plurality of packets to sent the divided packets out. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the best-value scenario of segmentation, dispersion, assemblage, and routing of electronic data to fulfill the request taught by Kato in Almgren's method of communication service for the purpose of optimizing the use of the service provider's resources.

***Conclusion***

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Anish Sikri whose telephone number is (571) 270-1783. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Pérez-Gutiérrez can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

Art Unit: 2109

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Anish Sikri  
A.S./a.s.

January 23, 2007

  
RAFAEL PEREZ-GUTIERREZ  
SUPERVISORY PATENT EXAMINER

2/5/07